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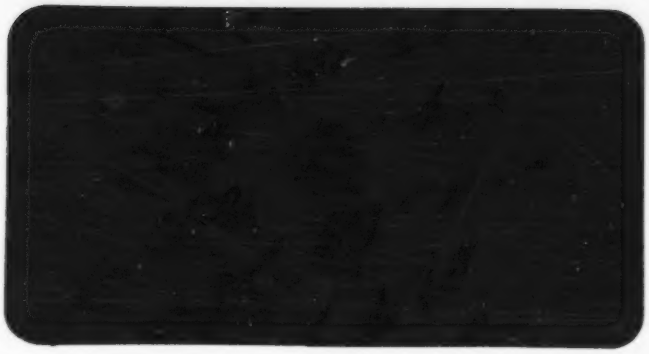

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1987

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Table of Contents

Page

Introduction 1

Canadian Air Traffic
- Overview 2
- Passenger Traffic 4
- Cargo Traffic 10
- Aircraft Movements 15
- Canadian Level I Carriers 19
- Canadian Carrier Fleet Acquisitions 25

Air Traffic in the U.S.A. 27

North Atlantic and World Traffic
- North Atlantic Traffic 32
- World Traffic 35

APPENDIX A - Pertinent Items Relating to 1987 Traffic

APPENDIX B - Glossary of Terms

APPENDIX C - References

Tables

		Page
Table 1	*Enplaned & Deplaned Passengers at the Top 30 Airports*	4
Table 2	*Enplaned & Deplaned Passengers at the Top 3 Airports*	7
Table 3	*Enplaned & Deplaned Cargo at the Top 30 Airports*	10
Table 4	*Enplaned & Deplaned Cargo at the Top 3 Airports*	13
Table 5	*1977, 1986, 1987 Aircraft Movements at T.C. Tower Controlled Airports*	17
Table 6	*Canadian Level I Carriers - Operating and Financial Statistics*	20
Table 7	*U.S. Scheduled Airlines - Operating and Financial Statistics*	31
Table 8	*North Atlantic Traffic 1983 - 1987*	33
Table 9	*North Atlantic Scheduled Passenger Traffic - 1987 Market Shares Among the Top 20 Airlines*	34
Table 10	*Scheduled Domestic and International World Air Traffic 1978 - 1987*	35
Table 11-A	*Total Scheduled Tonne-km Performed - Ranked by Country*	36
Table 11-B	*International Scheduled Tonne-km Performed - Ranked by Country*	37
Table 12	*Financial Results - ICAO Scheduled Airlines*	39

Figures

		Page
Figure 1	*Passenger Traffic by Type of Service Top 30 Airports*	6
Figure 2	*Cargo Traffic by Sector/Type of Service Top 30 Airports*	11
Figure 3	*Aircraft Movements by Type of Operation Airports with T.C. Towers*	15
Figure 4	*Top 5 Airports' Share of 1987 Itinerant Movements at Tower Airports*	18
Figure 5-A	*Canadian Carrier Levels I - IV Distribution of 1987 Unit Toll RPK's*	21
Figure 5-B	*Canadian Carrier Levels I - IV Distribution of 1987 Operating Revenues*	21

Introduction

This 1987 edition is part of a consecutive series of reports first produced in 1974 to present an overview of the Canadian air travel industry.

The report begins with a discussion of Canadian air traffic at the major airports, and also includes a brief section on the Canadian Level I carriers' system traffic and financial results. This year a brief section highlighting some of the Canadian carriers' new aircraft acquisitions has been included.

For comparison purposes, similar information follows in subsequent sections presenting U.S., North Atlantic and World traffic and airlines' financial results.

Canadian Air Traffic

Overview

Enplaned and deplaned (E&D) passenger and cargo volumes are discussed in the following chapters, to provide an indication of activity-related demand on airport services and facilities, and traffic trends in Canada. Passenger traffic has climbed steadily over the past decade, with the exception of the recessionary period, between 1981 and 1983. In 1987, all Canadian airports combined handled an estimated 59.8 million passengers. Annual growth throughout the decade (1977 - 1987) averaged 3.4 percent per year, despite severe fluctuations during the periods 1980 - 1983, when traffic decreased by an average 4.6 percent per year, and 1983 - 1986, when growth averaged 6.6 percent per year. Passenger traffic during 1986 was particularly high, due to EXPO 86, held in Vancouver from May through October of that year.

Air cargo, too, has enjoyed moderate growth during the past decade, at an average annual rate of 2.4 percent. Similar to the pattern observed in the passenger traffic, growth during the post-recessionary period has been much higher than that achieved prior to the economic downturn.

Another facet of Canadian air traffic is reflected in the discussion of aircraft movement statistics at Canadian tower-controlled airports. These data, collected by the tower personnel, provide an indication of total airport usage, including non-commercial traffic which is not captured in any other survey; they are used extensively in determining operational and navigational requirements, fee calculations, and the planning of facilities and services.

Unlike the revival of passenger traffic following the recession, itinerant movements grew more slowly, held back by lagging recovery in the General Aviation sector, which sustained a longer period of decline -- from 1981 through 1986. This was most evident in the private aircraft movements, where the effects of the recession, coupled with sustained higher operating costs throughout the decade, have curtailed private flying. These effects have been mirrored also in the steadily decreasing number of student permit holders, which have dropped almost 44 percent from 24,500 in 1980, to less than 14,000 in 1986. Together with the first

increase in student permits in 1987, private movements similarly exhibited the first tentative sign of recovery in 1987.

Finally, the Canadian Level I carriers' system operating and financial statistics, as well as a brief discussion of recent fleet acquisitions, are presented to complete the presentation of Canadian air traffic.

Canadian Air Traffic

Passenger Traffic

The figures shown in Table 1 below depict the volumes of passengers flown on mainline unit toll, other unit toll and charter services, to/from the Top 30 airports in Canada, during 1986 and 1987, including the 1986/87 year over year percentage change. These airports combined represent close to 90 percent of total passenger volumes handled at all Canadian airports.

Table 1
Enplaned and Deplaned Passengers at the Top 30 Airports

	000's E&D Passengers 1986	1987	%Change
Mainline Unit Toll Services			
Domestic	32,446.4	31,546.7	-2.8
Transborder	9,062.5	9,305.7	2.7
Other International	3,272.9	3,911.4	19.5
Total	44,781.9	44,763.6	0.0
Other Unit Toll Services	4,130.0	5,459.8	32.2
Charter Services	3,925.0	4,072.1	3.7
Grand Total All Services	52,836.7	54,295.6	2.8

Total passenger volumes recorded in 1987 reflect a moderate increase (2.8 percent) over the previous year, growing to over 54 million enplaned and deplaned passengers at the Top 30 airports.

Traffic carried on mainline unit toll services, i.e. scheduled services offered by Air Canada, Canadian Airlines International, Wardair and their foreign counterparts, showed virtually no change from 1986 passenger volumes -- a result of the continued displacement of traffic to these carriers' affiliates. This traffic shift affected predominantly the domestic sector of

mainline scheduled services, which fell by almost 3 percent from 1986 volumes. Nevertheless, domestic travel still accounts for over 70 percent of all mainline scheduled operations. A 19-day strike by Air Canada's ground workers near the end of the year also contributed to lowered passenger volumes on mainline services in 1987.

Transborder traffic, i.e. passengers travelling to and from the United States on mainline scheduled services, exhibited moderate growth (2.7 percent), also reflecting some diffusion to the other unit toll services. Significant growth was realized in scheduled traffic to/from other international points, with a 19.5 percent increase over the previous year. While there has been an increase in foreign travel to Canada in recent years, some of the growth in 1987 can also be attributed to Wardair's gradual transition from pure charter to scheduled operations.

Other unit toll services continued to expand at a significant rate, showing a 32 percent increase in the number of E&D passengers in 1987. This sector of the industry has almost tripled its market since 1984, when air transport regulations were first relaxed in Canada. 1987 marks the first year that traffic volumes carried on these services exceeded passenger volumes on charter services.

Charter traffic grew by 3.7 percent compared with 1986 volumes, to over 4 million passengers carried in 1987. Over 97 percent of this traffic was comprised of international travel, which experienced strong growth (over 10 percent) compared with 1986 traffic. Domestic charter operations decreased significantly relative to 1986, attributable in part to EXPO, as well as the continued transition of Wardair's services to scheduled operations.

Charter travel to/from Europe, which makes up approximately 23 percent of international charter traffic, fell to its lowest point recorded in five years. Despite continued steady increases in traffic to/from France (141 percent in 1987) and Italy (31.5 percent), other destinations such as the United Kingdom, Norway and Spain suffered declining traffic levels in 1987.

Canadian Air Traffic

Charter travel to/from Southern destinations was up by 34 percent in 1987, boosted by the recent popularity of destinations in South America and the Dominican Republic. Mexico also experienced a resurgence in popularity during 1987, with over 56 percent more traffic reported over 1986 volumes. The southern charter travel market ranks second only to transborder charter traffic, and accounts for 36 percent of all international charter passengers.

Charter travel between Canada and the U.S., in spite of only moderate growth in 1987, continues to make up the largest portion (42 percent) of the international charter market.

Figure 1 depicts passenger traffic trends at the Top 30 airports over the past decade.

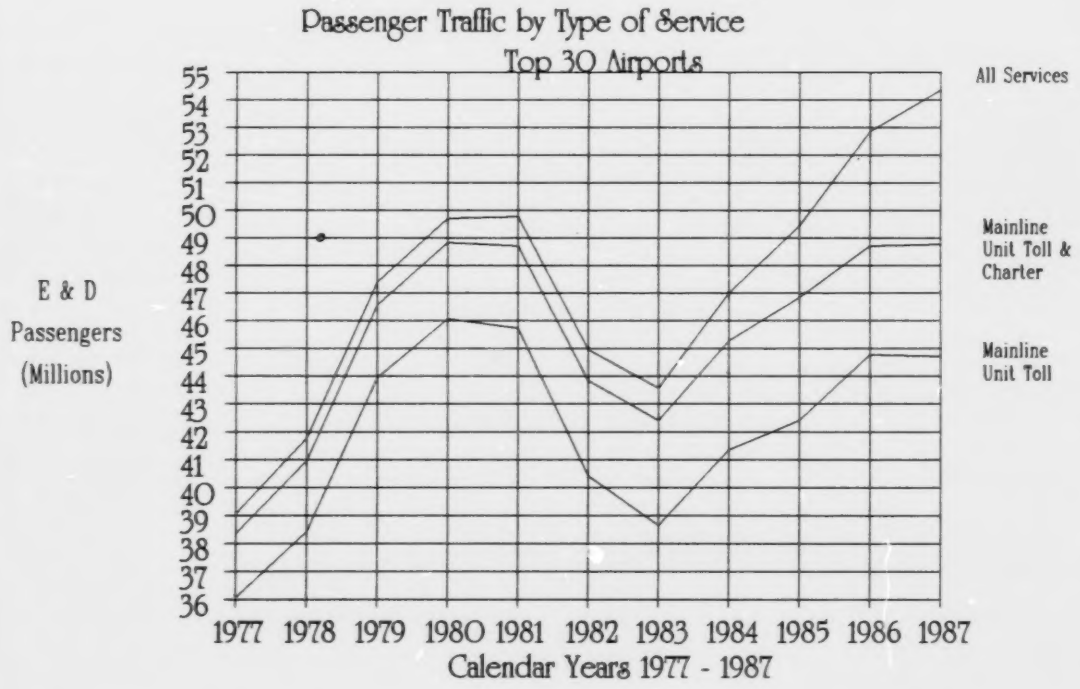

Figure 1

Canadian Air Traffic

Table 2 shows the enplaned and deplaned passenger traffic at the Top 3 airports in Canada, with Mirabel and Dorval combined as Montreal Area.

Table 2
Enplaned and Deplaned Passengers at the Top 3 Airports

	000's E&D Passengers 1986	1987	% Change
Toronto (Lester B. Pearson)			
Mainline Unit Toll Services			
Domestic	8,796.8	8,953.6	1.8
Transborder	4,275.8	4,553.9	6.5
Other International	1,499.7	1,884.0	25.6
Total	14,572.4	15,391.5	5.6
Other Unit Toll Services	493.2	655.3	32.9
Charter Services	2,056.2	2,304.7	12.1
Grand Total All Services	17,121.8	18,351.5	7.2
Montreal Area			
Mainline Unit Toll Services			
Domestic	3,559.1	3,511.2	-1.3
Transborder	1,966.5	1,982.5	0.8
Other International	990.0	1,149.1	16.1
Total	6,515.7	6,642.8	2.0
Other Unit Toll Services	302.6	451.3	49.1
Charter Services	708.5	850.4	20.0
Grand Total All Services	7,526.9	7,944.5	5.5
Vancouver International			
Mainline Unit Toll Services			
Domestic	4,699.5	4,185.3	-10.9
Transborder	1,705.4	1,560.5	-8.5
Other International	523.2	585.8	12.0
Total	6,928.1	6,331.6	-8.6
Other Unit Toll Services	973.7	1,096.6	12.6
Charter Services	513.1	394.3	-23.2
Grand Total All Services	8,414.8	7,822.5	-7.0

Canadian Air Traffic

Montreal Area marginally displaced Vancouver International as the second-busiest airport in Canada in 1987, following Vancouver's brief rise to that ranking in 1986, with record passenger volumes attributed to EXPO 86. Pearson International remains the busiest airport, with over 18 million E&D passengers reported in 1987 -- exceeding the traffic of both Vancouver and Montreal Area combined.

Both Lester B. Pearson and Montreal Area airports experienced growth in the number of passengers handled during 1987, with overall increases of 7.2 and 5.5 percent, respectively. Vancouver's traffic volumes dropped by 7 percent from the inflated traffic levels which the airport experienced as a result of EXPO 86; discounting this effect, the averaged rate of growth at Vancouver between 1985 and 1987 was still over 5 percent per year.

At all three sites, passenger traffic was bolstered by exceedingly strong growth in the other unit toll service sector. As a result of affiliations established between the major and regional carriers in Canada, services on lower-volume, short-haul routes have gradually been taken over by the regional carriers, using smaller, more efficient aircraft. This is evidenced by increases of close to 33 percent at Lester B. Pearson International, 49 percent at Montreal Area, and almost 13 percent at Vancouver International, in the other unit toll service sector.

Despite the rapid growth in other unit toll services, the scheduled traffic of the mainline carriers continues to account for over 80 percent of all passenger traffic at the Top 3 sites. 1987/86 comparisons within this sector varied, from increases of close to 6 percent and 2 percent at Pearson International and Montreal Area, respectively, to a decrease of almost 9 percent at Vancouver International from 1986. (Averaged between 1985 and 1987 Vancouver's mainline unit toll traffic actually grew by an average 4.9 percent per year.)

The volume of traffic carried on mainline unit toll services at the Top 3 sites accounted for over 60 percent of this sector's total at the Top 30 airports. Domestic traffic carried on mainline unit toll services showed little, if any increases at the Top 3 airports.

airport to airport; passenger volumes in this traffic sector grew by 6.5 percent at Pearson International, less than 1 percent at Montreal Area, and decreased by over 8 percent at Vancouver. In the case of the latter however, discounting the effects of 1986 EXPO traffic, transborder traffic actually increased by an average 13.6 percent per year between 1985 and 1987.

Scheduled traffic between the Top 3 airports and other international destinations increased dramatically during 1987. Pearson International recorded increases of almost 26 percent, following strong growth in this sector (13.8 percent) during 1986 also. Other international traffic at Montreal Area airports recovered from a 6 percent decrease in the previous year, growing by 16 percent in 1987. Despite inflated increases in this sector at Vancouver International in 1986, other international passenger traffic increased again, by 12 percent in 1987.

Mixed results were experienced among the Top 3 airports in charter traffic. At Pearson International, passenger volumes increased by 12 percent, Montreal Area airports recorded a 20 percent increase in charter travel, and Vancouver International's charter volumes dropped by over 23 percent. In the case of the latter, the substantial decreases in the charter component are not an effect of particularly high traffic volumes in 1986; charter services were the one component of Vancouver's traffic which actually experienced a decrease in 1986 (23 percent). More likely, this reflects the steady displacement of Wardair's charter market to its expanding scheduled services.

Cargo Traffic

The figures shown in Table 3 below depict the volumes of cargo flown on mainline unit toll and charter services, to/from the Top 30 airports in Canada, during 1986 and 1987, including the 1986/87 year over year percentage change.

Table 3
Enplaned and Deplaned Cargo at the Top 30 Airports

	000's Tonnes E&D Cargo		
	1986	1987	% Change
Mainline Unit Toll Services			
Domestic	316.5	308.6	-2.5
Transborder	61.3	68.4	11.6
Other International	138.6	149.0	7.5
Total	516.4	526.0	1.9
Charter Services	25.1	33.3	32.7
Grand Total All Services	541.6	559.3	3.3

A total of 559 thousand tonnes of cargo were enplaned and deplaned at Canada's Top 30 airports during 1987. Despite a moderate increase over 1986, cargo volumes still fell short of the 570 thousand tonnes reported in 1985.

Some explanation for slower growth in air cargo traffic may be found in examining changing trends in business operations. Spurred by sustained high interest rates and relative values of foreign currencies, businesses are maintaining closer control over inventories; improved technology allows them to more easily track where and how much of a commodity is needed. Also, the growing use of electronic transmission for papers and documents, such as FAX, will undoubtedly exert a negative effect on the traditional modes, i.e. mail and cargo, although it is likely that the small package courrier services will be the most directly impacted.

The new National Transportation Act (NTA), which became law as of January 1, 1988, includes reductions in the level of regulation within the trucking and rail industries among its reforms. While fare wars are currently restricted to the passenger market, they are expected to eventually spill over into cargo activities also, as a result of increased competition stimulated by these reforms.

Figure 2 depicts cargo trends at the Top 30 airports over the past decade.

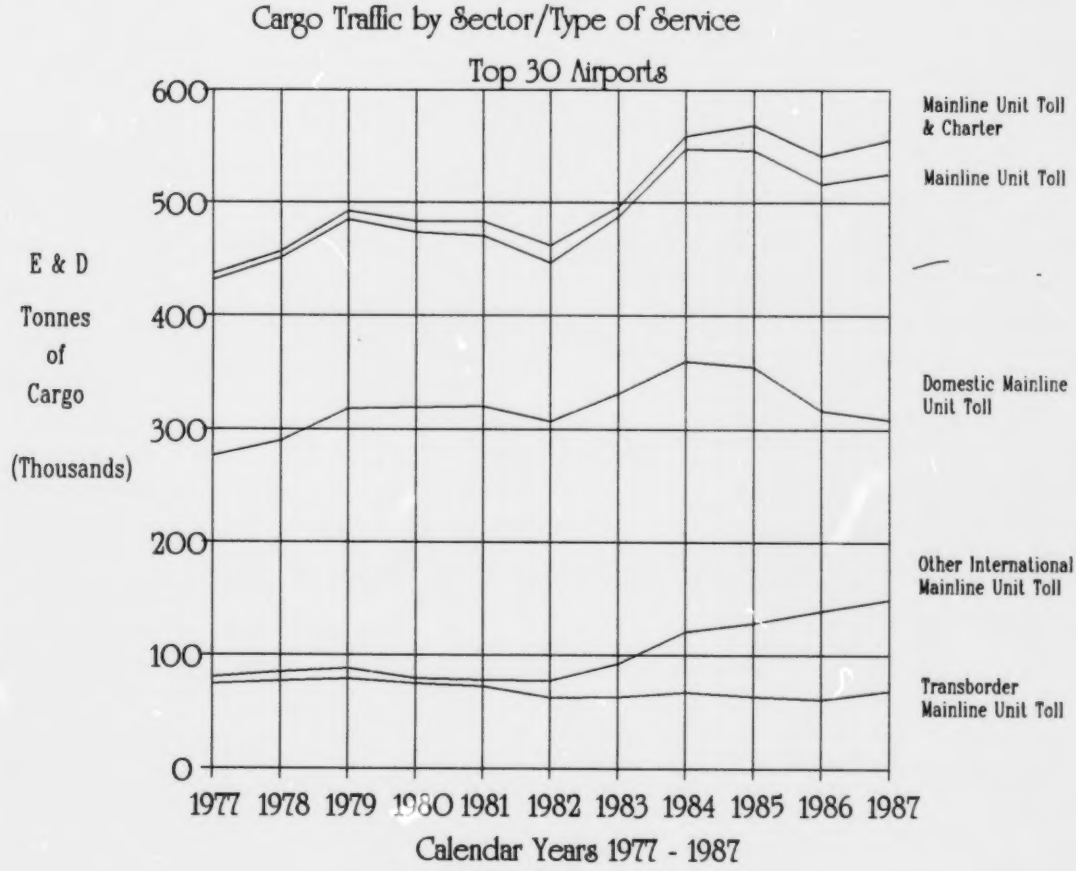

Figure 2

Domestic cargo carried on mainline unit toll services decreased by 2.5 percent in 1987. As with the shift seen in passenger traffic from the mainline to other unit toll sector, statistics reported on a system basis by these carriers suggest a similar shift in terms of cargo traffic. (Other unit toll carriers do not report E&D cargo). The increasing popularity of the small package and overnight courrier services, many of whom combine the use of their own aircraft and trucks to provide clients with door-to-door service, may also be exerting an effect upon domestic air cargo traffic. Similar to the other unit toll services, these carriers are not required to report statistics on their activities.

Transborder cargo traffic, although still the smallest component of mainline scheduled services, increased by 11.6 percent over 1986 traffic volumes. Cargo carried by air to other international points also grew, by 7.5 percent in 1987.

Charter services increased their total volume of cargo handled at the Top 30 airports by almost 33 percent; over 33,000 tonnes of cargo were enplaned and deplaned, comprising almost 6 percent of the total cargo handled.

Table 4 shows the enplaned and deplaned cargo traffic at the Top 3 airports in Canada, with Mirabel and Dorval combined as Montreal Area.

Table 4
Enplaned and Deplaned Cargo at the Top 3 Airports

	000's Tonnes E&D Cargo		
	1986	1987	% Change
Toronto (Lester B. Pearson)			
Mainline Unit Toll Services			
Domestic	109.3	115.4	5.6
Transborder	35.2	38.0	8.0
Other International	62.3	71.6	14.9
Total	206.8	225.1	8.8
Charter Services	12.4	18.1	46.0
Grand Total All Services	219.2	243.2	10.9
Montreal Area			
Mainline Unit Toll Services			
Domestic	40.1	35.4	-11.7
Transborder	9.4	12.6	34.0
Other International	55.1	54.0	-2.0
Total	104.6	102.0	-2.5
Charter Services	5.3	7.1	34.0
Grand Total All Services	109.9	109.1	-0.7
Vancouver International			
Mainline Unit Toll Services			
Domestic	60.0	60.1	0.2
Transborder	11.9	13.8	16.0
Other International	15.7	15.7	0.0
Total	87.5	89.5	2.3
Charter Services	2.6	2.0	-23.1
Grand Total All Services	90.1	91.5	1.6

Air cargo trends among the Top 3 airports varied considerably from site to site. Lester B. Pearson International experienced an overall growth rate of close to 11 percent in 1987. Montreal Area airports basically maintained the cargo volumes reported in 1986, as did Vancouver International. Combined, the three airports handled almost 80 percent of the total cargo recorded at the Top 30 airports; Toronto alone accounts for over 40 percent, with Montreal Area and Vancouver airports handling another 20 percent and 16 percent, respectively.

Within mainline unit toll services, performance among sectors varied considerably. At Pearson, where over half of the scheduled cargo handled involves domestic flights, cargo volumes in this sector increased by 5.6 percent over 1986. Montreal Area airports experienced a decline in domestic cargo processed (11.7 percent), and Vancouver International effectively maintained its 1986 domestic cargo levels.

Transborder traffic increased significantly at all three sites, with Pearson, Montreal Area, and Vancouver recording growth rates of 8, 34 and 16 percent, respectively. Pearson International also experienced significant growth in cargo to other international destinations, while Montreal Area and Vancouver International reported little change from 1986 volumes.

Aircraft Movements

During 1987, total aircraft movements at Transport Canada's tower-controlled airports increased by 6.0 percent over 1986 traffic, marking the second year of traffic growth since 1979. These 61 airports together account for over 75 percent of the total aircraft movements reported by all airports in Canada.

Of the 5.5 million aircraft landings and take-offs handled at these airports in 1987, almost 3.4 million were itinerant movements, which increased by 7.1 percent over 1986 volumes; local traffic accounted for over 2.1 million movements -- an increase of 4.2 percent over 1986. *Figure 3 below, depicts traffic trends within the total, itinerant and local categories over the last 10-year period.*

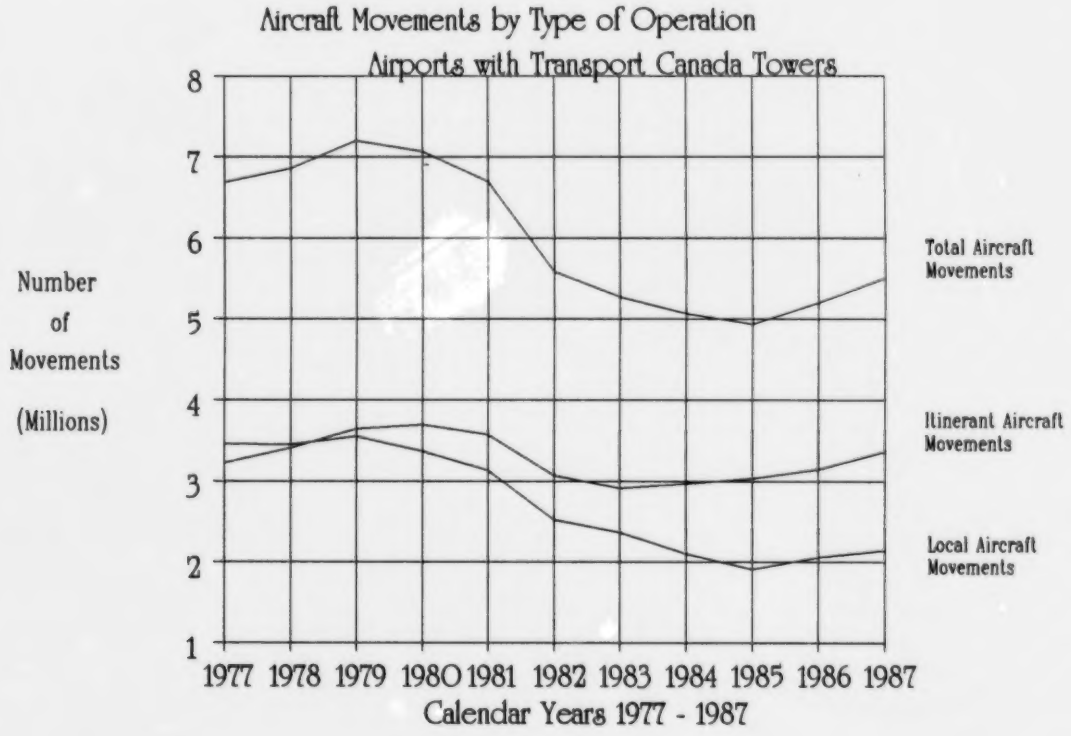

Figure 3

1987 also marked a return to positive growth throughout all component sectors. Air carrier movements exhibited the highest growth among the various sectors, with unit toll and charter movements increasing by 9.2 and 8.3 percent, respectively. Since 1980, air carrier movements have almost doubled their proportion of total aircraft movements, increasing from a share of 12.6 percent to over 21 percent in 1987. Other commercial traffic also showed strong growth, increasing by 7.9 percent in 1987 over 1986. The rising traffic volumes within these categories reflect the regional carriers' growing presence in the Canadian air transportation system, as large aircraft on many routes are being replaced by more frequent services using smaller aircraft.

Private aircraft movements totalled over 704,000 in 1987, reflecting a 2.4 percent increase over the previous year. This follows a continuous trend of decline in the private category since its peak in 1979, at almost 957,000 private movements. Aircraft movements in the government category during 1987 reflected an increase of 7.5 percent in the civil sector and no change in military movements from 1986 volumes. The portion of aircraft movements in the government category has increased slightly over recent years, from approximately 180,000 movements in 1979, to 207,000 annual movements recorded in 1987.

Local movements increased by 4.2 percent during 1987, to a total of over 2.1 million movements. Reflecting the increased costs of fuel and flying training, it may take some time for local traffic to attain the peak 3.6 million movements recorded in 1979.

Table 5 compares the current distribution of aircraft movements among the various categories to that of the preceeding decade.

Table 5
1977, 1986, 1987 Aircraft Movements (000's) at Transport Canada's Tower Controlled Airports

Type of operation	1977	% of Total	1986	1987	% of Total	%change
Air Carrier						
- Unit Toll	760.1	*11.4*	988.6	1079.7	*19.8*	9.2
- Charter	56.3	*0.8*	78.6	85.1	*1.6*	8.3
Other Commercial	1291.5	*19.3*	1153.9	1245.3	*22.8*	7.9
Private	938.0	*14.0*	688.0	704.1	*12.9*	2.3
Government						
- Civil	92.4	*1.4*	95.4	102.6	*1.9*	7.5
- Military	89.3	*0.1*	103.8	104.0	*1.9*	0.2
Total Itinerant	3227.6	*48.3*	3144.3	3366.4	*61.1*	7.1
Total Local	3461.2	*51.7*	2056.5	2143.8	*38.9*	4.2
Total	6688.8	*100.0*	5200.7	5510.2	*100.0*	6.0

NOTE: Vancouver Harbour included in totals only

Source: Aircraft Movements Survey.

Domestic flights continued to dominate itinerant aircraft movements in 1987, comprising almost 88 percent of all itinerant activity. The remainder of the activity at the tower airports consisted of transborder (9.2 percent) and other international (1.6 percent) traffic.

While piston-powered aircraft continue to account for the largest share (47.6%) of itinerant movements in 1987, the proportion of turbo-prop powered aircraft has been steadily increasing since 1978, reaching 20 percent of itinerant movements in 1987; the share of jet aircraft has been eroding at a similar pace, demonstrating another significant change in the Canadian air transportation system.

Canadian Air Traffic

For the first time in twelve years, membership among the five busiest airports changed, with Edmonton Municipal airport being displaced by Victoria International. Among Canada's five busiest airports in terms of itinerant movements, Lester.B.Pearson International again ranked first with a record 313,764 itinerant movements, the highest annual count yet to be recorded by a Canadian airport. Vancouver International, following another year of strong growth (8.5% over 1986), was the second-busiest airport, with 302,598 itinerant movements. Dorval and Calgary retained their 1986 rankings of third and fourth respectively, while Victoria International took fifth place, with over 123,000 itinerant movements in 1987. *Figure 4 illustrates the proportion of these airports' total itinerant movements at Canada's 61 towered airports.*

Top 5 Airports' Share of 1987

Itinerant Movements at Tower Airports

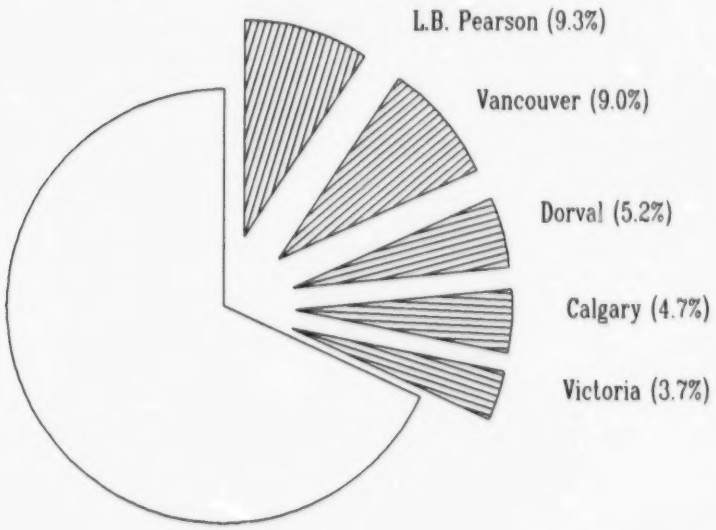

Figure 4

Canadian Air Traffic

Canadian Level I Carriers' System Traffic and Financial Results

Scheduled passenger volumes for the Level I carriers increased by almost 2 percent, to over 23 million passengers during 1987. Load factors, i.e. the percentage of seating capacity *used*, have been increasing steadily since 1985, reaching over 69 percent in 1987. Growth in revenue passenger-kilometres registered over 3 percent, exceeding the increase in passengers carried, and indicating continued expansion, particularly in the long-haul markets. Cargo traffic also showed significant growth, with the number of goods-tonne-kilometres increasing by over 4 percent.

Preliminary estimates for 1987 on fare type utilization indicate that 55.1 percent of passengers carried on domestic scheduled services travelled on some form of discount fare. These estimates, reflecting passengers carried on the Level I carriers' scheduled domestic services, show a decline from 1986 proportions of discount travel which totalled 57.9 percent. Again, record proportions of discount travel during the third quarter of 1986 due to EXPO, as well as increased competition between scheduled carriers following Wardair's entry to the domestic scheduled market in 1986, contributed to increased use of discount fares in 1986.

Financial results for 1987 indicate a profitable year for the three major carriers, with a combined operating income of $262.5 million, an increase of 24 percent over 1986 results. These results would have been considerably better yet, if not for the strike which halted Air Canada's operations for almost three weeks during December. Total operating revenues grew by over 3 percent, exceeding increases in expenses which were reported at 2.4 percent.

Table 6 depicts representative performance statistics for the Level I carriers during the period 1981 to 1987. 1987 data reflect the operations of Air Canada, Canadian Airlines International Ltd. (CAIL) and Wardair, for services flown under their respective licences. Services operated by affiliated carriers are not reflected in these numbers.

Table 6

Canadian Level I Carriers - Operating and Financial Statistics

	1981	1982	1983	1984	1985	1986	1987	%Change 1986/87
Passengers Enplaned (000)	21,835	19,189	18,105	21,604	21,981	22,599	23,011	1.8
RPK's (000,000)	35,350	32,094	31,288	34,105	35,825	39,005	40,205	3.1
Passenger Load Factor (%)	65.1	62.7	65.3	67.0	65.1	66.6	69.1	3.8
Goods Tonne-Kilometers (000)	850,362	899,987	962,841	1,105,069	1,136,635	1,156,586	1,205,533	4.2
Total Op. Revenues (Can. $000)	3,837,896	3,882,281	3,869,801	4,215,198	4,623,685	4,870,435	5,032,964	3.3
Total Op. Expenses (Can. $000)	3,731,631	3,931,421	3,849,526	4,104,966	4,572,069	4,658,880	4,770,461	2.4
Op. Income (Loss) (Can. $000)	106,265	(49,140)	20,275	110,232	51,616	211,555	262,502	24.1

Note: Traffic statistics shown above reflect unit toll services only while the financial result correspond to all services, ie. unit toll and charter.

Expenses relating directly to the cost of flying comprised approximately 59 percent of total operating expenses in 1987; this component has reached considerably higher proportions in recent years. Aircraft fuel expenses remain by far the largest single operating expense component. A major contribution to the airlines' ability to hold operating expenses down in 1987 was the fact that world oil prices remained below 1986 levels for the first five months of the year. The Level I carriers spent a total of $888 million on aviation fuel in 1987; with the fuel costs of the Levels II and III carriers, total expenditures exceeded $1.1 billion.

The average number of persons employed by the Level I carriers totalled 37,485 in 1987, with a total of $1.4 billion paid out in salaries and wages. Including the Level II and III carriers, an industry average of over 46,000 employees were paid a total of $1.7 billion during 1987.

Indications of 1988 traffic results for the Level I carriers promise strong growth in passenger enplanements and RPK's, as well as moderate gains with respect to the carriage of cargo. While operating revenues continue to increase over 1987, expenses are growing at a higher rate, implying the possibility of reduced profits in 1988. *Figures 5-A and 5-B illustrate the proportional distribution of traffic and revenues among the three Level I carriers, as well as the Level II, III and IV carriers, in 1987.*

Canadian Carrier Levels I - IV
Distribution of 1987 ...

Unit Toll RPK's

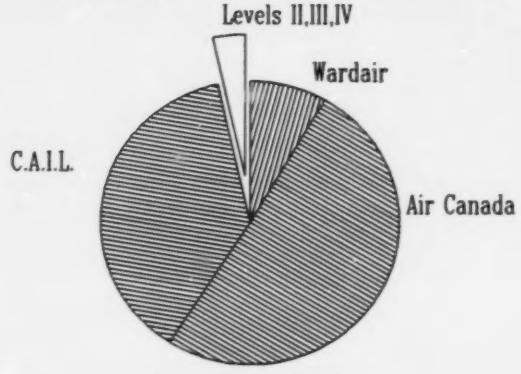

Figure 5-A

Operating Revenues

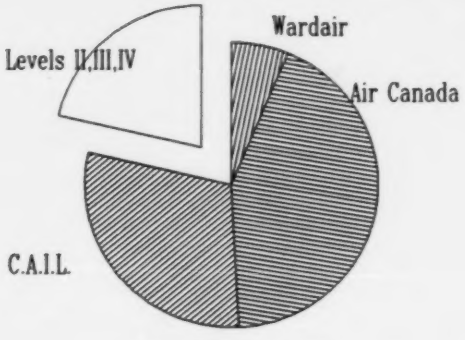

Figure 5-B

Canadian Air Traffic

For Air Canada, 1987 was a year of mixed results; although operating income for the first three quarters of 1987 considerably exceeded 1986 results for the same period, the airline's 19-day shutdown during the fourth quarter offset this gain.

Air Canada reported strong growth in passenger yields, attributed to increased emphasis on efficient aircraft scheduling as well as strong economic performance in Ontario and Quebec. The airline's connector network was strengthened through the schedule integration of Air Ontario, AirBC and Air Nova, redirecting a significant amount of traffic feed to Air Canada's routes. In January of 1987 Air Canada purchased 75 percent of Air Ontario Inc. (an amalgamation of Air Ontario Ltd. and Austin Airways Ltd.), followed by 100 percent acquisition of AirBC Ltd. in February 1987. An agreement resulting in Air Canada's acquisition of 90 percent of Northwest Territorial Airways Ltd. was established during 1987, linking 10 western artic communities to Air Canada's passenger and cargo network. Other affiliates are Air Toronto (formerly Commuter Express), providing service from Toronto to a number of U.S. destinations, and Air Alliance, Air Canada's latest connector carrier, which commenced operations in early 1988 to serve major regional markets in Quebec.

Air Canada reported a decline in cargo yields, particularly on international routes where price competition is growing in conjunction with expanding cargo capacity. Acquisitions of courier and messenger services during 1987 included Express Messenger Systems Inc. and Northern Express Messenger Systems Ltd., as well as Gelco Express Ltd.

With the acquisition of Canadian Pacific Air Lines Ltd. by the PWA Corporation in February of 1987, the formation of a new airline, Canadian Airlines International Ltd. (CAIL), was made official. Following this merging of the former CPAir, Eastern Provincial, Nordair and PWA, CAIL established Ontario Express Ltd. (Canadian Partner), effective July 15, 1987, to serve nine Ontario cities. The carrier's feeder network was further strengthened through a succession of agreements which designate Time Air, Calm Air, Ontario Express, Inter-Canadien and Air Atlantic as Canadian Partners. Inter-Canadien is the result of the merger of Nordair

Metro and Quebecair.

Passenger revenues accounted for 77 percent of C.A.I.L.'s total operating revenues, with approximately 61 percent of these revenues generated from domestic operations. Early in 1987, frequency on the Toronto-Ottawa-Montreal route was enhanced by an additional 10 flights daily.

Revenues from freight services made up another 9 percent of total operating revenues. C.A.I.L. continued to aggressively pursue the competitive envelope and small package market, launching a new door-to-door package delivery service during 1987. In April 1987, the carrier entered into a commercial agreement with Flying Tigers, a U.S.-based air cargo company. The two-year agreement has allowed C.A.I.L. to increase its market share on vital international routes and provides extra cargo capacity on some previously restricted scheduled routes.

During the year, Wardair continued its transition from operating only charter flights, to an airline providing both scheduled and charter services; in 1987, Wardair realized 50 percent of its passenger revenues from scheduled services. Despite strong growth (over 6 percent) in numbers of passengers carried and RPK's, increases in operating expenses outstripped revenues by 13 percent vs. 7 percent, respectively. Lower load factors contributed significantly to these results, a consequence of the transition to scheduled operations at a higher frequency while still utilizing large aircraft. Significant increases in operating expenses were noted, particularly in the areas of wages and benefits due to hiring of extra personnel, and in fuel expenditures, as a result of increased flying. Additional expenses were also incurred in advertising, in order to instill a better awareness of Wardair's expanding services among consumers.

Wardair increased its domestic route capacity during the summer of 1987 by 8 percent; this sector provided about 20 percent of the total passenger revenues. A strong international market produced good results for Wardair during 1987 while transborder services suffered some decline in traffic.

Wardair's cargo operations have been growing steadily in recent years, with 1987 yielding a 40 percent increase in cargo revenues. While Pacific and North Atlantic routes remained strong areas of growth, it was domestic routes which influenced 1987 results the most, with cargo volumes having tripled over 1986 levels.

Canadian Air Traffic

Canadian Carrier Fleet Acquisitions

1987 and the first half of 1988 reflected an unprecedented period of activity in terms of fleet acquisitions for many of Canada's airlines, as carriers prepare to match equipment and services to the new commercial environment.

Air Toronto placed orders for seven British Aerospace Jetstream Super 31 aircraft in an effort to triple its capacity over the next few years. Air Nova placed orders and options to lease six jet aircraft from British Aerospace, in addition to firm orders for two BA 146 aircraft. Air Atlantic announced the purchase of eight new Dash-8 aircraft from de Havilland, while Inter-Canadien has ordered five turboprop ATR 42's, with an option on four others. The company also plans long term leases for three Fokker 100 jets.

At the end of 1987, Air Canada's operational fleet consisted of five 747's, fourteen 767's, fourteen L-1011's (plus two others on lease to a foreign carrier), eight DC-8 freighters, thirty-three 727's and thirty-five DC-9's. In addition, four extended range Boeing 767's were ordered, with delivery scheduled to begin in July of 1988. Long-term fleet plans are for gradual replacement of several of Air Canada's aircraft types, most likely the Boeing 727 fleet, with Airbus-320's, to better match the carrier's changing route networks. Currently, Air Canada's 727's are deployed on intermediate to long haul routes such as the Caribbean or Montreal-Vancouver. Its DC-9's serve the short haul domestic and transborder routes, while the 767's carry medium to long haul traffic within North America and internationally. The carrier's L-1011's and 747 Combi aircraft are being used on international routes, while the 747's serve predominantly the Eastern Canada-Florida and transatlantic markets.

C.A.I.L.'s operational fleet of twelve DC10's, sixty-six B-737's plus another leased DC10, was augmented in the spring of 1988 with an additional four B-767 aircraft. This acquisition will allow the carrier to transfer several of its 737's to serve non-stop routes between Vancouver-Montreal, Winnipeg-Montreal, Calgary-Ottawa, Saskatoon-Toronto and St. John's-Toronto. Firm orders have also been placed for eight B-767's, with an option for an

additional sixteen, as well as an additional order for ten A-320's and three B-747's, as part of C.A.I.L.'s long-term fleet planning process. Another eight A-320's will be leased from the manufacturer for use on domestic and transborder routes.

Wardair's extensive fleet acquisition plans involved orders for fourteen A310's and eight MD-88's, with an option for eight more MD-88's. The carrier's three B-747's will be retained, and a further order for twenty-four Fokker 100's was placed late in 1988, for delivery between 1990 - 1992. Three A310's were delivered late in 1987, two of which were pressed into service immediately to handle traffic displaced by the Air Canada strike. In addition to the A310's delivered late in the year and Wardair's three B-747's, its fleet at the end of 1987 included three DC10's.

Air Traffic in the U.S.A.

1987 proved a very good year for the U.S. scheduled airlines, setting new records in volumes of passengers and cargo transported. Despite wide fluctuations among individual operators in traffic, yields and unit costs, the industry as a whole registered close to (US)$2.5 billion in operating profits, almost doubling their 1986 results.

While the volume of enplaned passengers increased by almost 7 percent over 1986, increased traffic alone did not guarantee revenue growth or profitability. Contributing to their positive results was the airlines' improving ability to control yields and revenues. Marketing strategies in the first half of the year aimed at stimulating traffic growth. By keeping capacity growth below the month over month gains in traffic, overall load factors for the year rose by more than two points to a near-record 62.4 percent. Final results show an increase of 10.3 percent in annual revenue passenger-kilometres (RPK), countered with a smaller (6.7 percent) increase in available seat-kilometres. By year-end, 1987 yields had surpassed those achieved in both 1985 and 1986.

Frequent-flier programs, first introduced in 1981 and aimed at the business traveler, have proliferated, and are now offered by each of the top eight U.S. carriers. Heavy fare discounting throughout 1985, 1986 and the first half of 1987 also contributed to strong growth in passenger enplanements. In 1987, discounts off full fare averaged 62 percent, exceeding the 61 percent savings averaged in 1986, and reflecting continuous improvement since 1978, when discounts averaged only 34 percent off the full-priced ticket.

Of the 447 million passengers enplaned by the U.S. scheduled carriers in 1987, 31 million represented international traffic, increasing by 24 percent over the 25 million who travelled internationally in 1986. This growth is overstated however, due to lowered international traffic on account of terrorism, the Chernobyl nuclear accident and a weak U.S. dollar during 1986. Domestic traffic, comprising 93 percent of the U.S. carriers' enplanements, rose by 5.6 percent, and contributed heavily to the industry's overall increase of almost 7 percent in passenger

enplanements over 1986 volumes.

Passenger traffic was not the only factor contributing to the U.S. airlines' overall success during 1987; the year also marked strong growth in cargo (freight and express). Cargo tonne-kilometres flown during 1987 reached a record 12 billion, an increase of 12.5 percent over 1986. Boosted by a relatively high GNP in the United States during 1987, domestic cargo traffic, which makes up over 77 percent of the U.S. cargo market, experienced strong growth. The decreasing value of the U.S. dollar contributed to increased cargo traffic in the international sector.

In 1987, eight U.S. carriers (compared to twelve in 1978) captured 93 percent of the U.S. market, in terms of RPK's, with Texas Air, United and American together accounting for almost 50 percent of the total traffic. In 1978, marking the beginning of deregulation in the U.S., there were 36 carriers operating scheduled domestic services; by 1984, this number had risen to 123 carriers, and has since settled back to a total of 78 certificated air carriers at the end of 1987.

Beginning with the purchase of National Airlines by Pan Am and Hughes Airwest by Republic in 1980, a succession of airline mergers and buy-outs have taken place, dramatically changing the structure of the U.S. airline industry. Texas Air took over Continental in 1981, Piedmont later bought Empire, and People Express acquired Frontier. A series of acquisitions during 1986 and 1987 resulted in TWA being sold to Carl Icahn and Northwest doubling its size with the purchase of Republic. United Airlines bought Pan Am's Pacific division, American Airlines took over Air California, and TWA acquired Ozark. Texas Air bought Eastern Airlines and later, People Express, while Delta bought Western, and US Air acquired Piedmont.

Aside from major corporate realignment, the industry has changed in other ways as well. Hub-and-spoke systems now form the core of the major carriers' networks. By routing flights through central airport hubs, carriers can link points on which direct flights would be unprofitable and feed traffic into more lucrative long-haul routes. Currently, there are 44 major hubs within a total

of 29 airports. Code-sharing agreements with regional carriers serve to implement the strategy; 96.3 percent of the traffic flown by the top 50 regional carriers in 1987 was carried by carriers having code-sharing agreements with major/national carriers.

Computerized reservation systems (CRS) are rapidly being adopted as a very effective marketing and management tool. During the last seven months of 1987, the proportion of CRS in service in the U.S. increased by 16 percent. The systems enable carriers to better control their bookings, and ultimately maximize revenue yield per flight.

1987 concluded the U.S. airline industry's fifth consecutive year of operating profits. Operating revenues in excess of (US)$57 billion reflected an increase of almost 13 percent over the industry's 1986 results, while increases in operating expenses were kept at 11 percent, to a resulting (US)$54.6 billion.

With passenger revenues comprising over 78 percent of total operating revenues, major factors contributing to increased revenues were traffic stimulation programs and better yield management, discussed earlier. Unit costs increased during 1987, predominantly due to fuel prices, which have been steadily increasing since reaching a low near the end of 1986. Other expense components, including traffic commissions, landing fees, labour, food and interest expenses, all reflected moderate increases over 1986, with the exception of advertising and promotion expenses, which were lower than in the previous year. Industry employment, which had decreased during the early 1980's, has since increased a full 33 percent over 1978 employment numbers.

The outlook for 1988 promises similar financial results, with increases in operating revenues and expenses of approximately 10 and 9 percent, respectively, to yield an operating profit between (US)$2.5 to (US)$3.0 billion. Having established their markets shares, the airlines are expected to increase fares, despite minor traffic losses which may be incurred, in order to offset a projected 3 percent increase in unit costs. Capacity is expected to remain closely matched to traffic volumes in 1988, and airlines are placing increased emphasis on cabin service, schedule reliability

and on-time performance. Increased competition is also forecast in the small package and cargo operations. United Parcel Service is establishing its own pilot workforce, which was previously contracted, while Federal Express continues to expand its fleet and services in both domestic and international markets.

The trend towards smaller aircraft seen during the middle years of the post-deregulation era, was successful in strengthening U.S. hub-and-spoke systems. However, in response to the noise and air traffic control limitations which continue to hamper the carriers' operations at U.S. airports, a reversal of this trend has been indicated by recent orders for new large-capacity aircraft.

Selected traffic and financial statistics for the U.S. scheduled airlines over the past decade are shown in Table 7.

Table 7

U.S. Scheduled Airlines - Operating and Financial Statistics

	1981	1982	1983	1984	1985	1986	1987	%Change 1986/87
Passengers Enplaned (000)	285,976	294,102	318,638	344,683	382,022	418,946	447,307	6.8
RPK's (000,000)	400,528	417,836	453,539	491,014	541,363	589,871	650,640	10.3
Passenger Load Factor (%)	58.6	59.0	60.7	59.2	61.4	60.3	62.4	3.5
Cargo Tonne-Km (000)	8,300,857	8,003,209	8,894,791	9,586,235	8,803,712	10,721,247	12,058,091	12.5
Total Op. Revenues (US $000	36,662,555	36,407,635	38,953,972	43,825,047	46,664,414	50,524,933	57,020,400	12.9
Total Op. Expenses (US $000)	37,117,325	37,141,070	38,643,262	41,673,536	45,238,150	49,201,832	54,561,111	10.9
Op. Income (Loss) (US $000)	(454,770)	(733,435)	310,410	2,151,511	1,426,264	1,323,101	2,459,289	85.9
Net Profit (Loss) (US$ 000)	(300,826)	(915,814)	(188,051)	824,668	862,715	(234,909)	600,968	355.8

Note: ''Cargo'' is defined as Freight + Express

Source: Air Transport 1988 - Air Transport Association of America

North Atlantic and World Traffic

North Atlantic Traffic

The International Air Transport Association (IATA) compiles traffic and financial statistics on the air transport operations of its member airlines, as well as other airlines worldwide, affiliated with the Association through any of IATA's various agreements or systems.

International traffic statistics are compiled by IATA in accordance with three major route area definitions: North Atlantic, Mid Atlantic, and South Atlantic. The North Atlantic route area includes all transatlantic flights with a gateway in Continental United States or Canada, with the exception of polar flights between Europe, the Middle East, Africa and the Far East via Alaska. Since this route area comprises almost 90 percent of the world's total international traffic in terms of passengers carried, and because it represents the predominant area of international activity for Canadian carriers, North Atlantic traffic is presented as an entity to provide a context for comparison and discussion of Canadian international air traffic.

During 1987, almost 26 million passengers were carried on the North Atlantic ocean sector on scheduled and non-scheduled services of both IATA and non-IATA airlines. Of the total passenger traffic, 83 percent was comprised of travel to and from the United States, with Canada's share making up another 15 percent. While scheduled services continue to account for the lion's share of North Atlantic traffic, with 24 million passengers carried, the percentage increase in travel on scheduled vs. charter services was proportionally equal. This resurgence in transatlantic travel follows significantly lowered volumes during 1986 due to factors such as terrorism, the Chernobyl nuclear accident, and a weak U.S. dollar.

While the number of flights operated on North Atlantic routes grew by approximately 12 percent in 1987, seat capacity increased at a somewhat lesser rate of 9 percent. This slower rate of increase in capacity compared to demand produced a resulting passenger load factor of 70.5 percent, a full 8 point increase over 1986 load factors, achieved by an overall trend towards the airlines' use of smaller equipment.

North Atlantic and World Traffic

A total of 1.4 million tonnes of freight were flown across the North Atlantic during 1987, predominantly on scheduled services, with 25 percent of this traffic carried on all-cargo flights. Directional data indicate that eastbound traffic grew at a much faster rate than that of the westbound direction (30 percent and 2 percent, respectively). Similar to the passenger proportions, 85 percent of all North Atlantic freight was carried to/from the U.S. and 13 percent to or from Canada.

Annual percentage changes over the past 5 years, and 1987 preliminary traffic figures, for passenger, freight and flight volumes on North Atlantic routes, are shown in Table 8.

Table 8
North Atlantic Traffic 1983 - 1987

	Historical Trend Percentage Change over Previous Year					
	1983	1984	1985	1986	1987	%change 1987/86
Scheduled Services						
Flights	0.2%	9.8%	11.7%	3.6%	119,365	10.6%
Passengers(000's)	5.9%	12.6%	7.5%	-5.9%	24,022	21.9%
Freight(Tonnes)	9.8%	18.1%	1.5%	5.9%	1,301,838	12.0%
Charter Services						
Flights	-8.8%	7.7%	-14.8%	-32.2%	11,050	24.8%
Passengers(000's)	8.1%	13.8%	-13.1%	-30.2%	1,819	19.6%
Freight(Tonnes)	-1.2%	57.6%	-27.2%	68.9%	122,870	51.1%
All Services						
Flights	-1.1%	9.5%	8.0%	-0.4%	130,415	11.7%
Passengers(000's)	6.1%	12.7%	5.2%	-8.2%	25,841	21.7%
Freight(Tonnes)	9.3%	19.8%	-0.2%	8.5%	1,424,708	14.5%

Source: International Air Transport Association

Table 9 depicts scheduled passenger market shares ranked among the Top 20 Airlines on the North Atlantic.

Table 9
North Atlantic Scheduled Passenger Traffic - 1987
Market Share Ranked Among the Top 20 Airlines

Rank	Carriers	Passengers (000's)	Percent of Total 1987	1986
1	Pan Am	3,345.4	13.9	13.2
2	Trans World	2,960.5	12.3	12.2
3	British Airways	2,403.3	10.0	10.1
4	Lufthansa	1,701.1	7.1	6.8
5	KLM-Royal Dutch	1,316.3	5.5	5.8
6	American	982.8	4.1	2.7
7	Air France	863.8	3.6	3.7
8	**Air Canada**	**832.3**	3.5	4.1
9	Northwest	740.0	3.1	2.9
10	Swissair	688.0	2.9	3.1
11	Alitalia	654.6	2.7	2.9
12	Delta	631.6	2.6	2.1
13	Continental	585.1	2.4	0.7
14	BCAL	575.1	2.4	2.4
15	SAS	547.4	2.3	2.7
16	Iberia	473.6	2.0	1.9
17	**CAIL**	**410.6**	1.7	1.9
18	El Al	394.9	1.6	1.9
19	Virgin Atlantic	388.8	1.6	1.5
20	Aer Lingus	345.9	1.4	1.7
	Top 20	20,841.1	86.8	84.2
	Others	3,180.6	13.2	15.8
	Total	24,021.7	100.0	100.0

Source: International Air Transport Association

World Traffic

Operating results for the world's airlines, as represented by members of the International Civil Aviation Organization (ICAO) Contracting States, indicate that 1987 produced the highest annual growth rate in scheduled passenger traffic since 1979. A total of 1.04 billion passengers were carried, representing an increase of 8.5 percent over the 956 million carried during 1986. Passenger-kilometres grew at an even higher rate, 9.7 percent, to 1,591 billion. Passenger load factors increased by two percentage points, from 65 to 67 percent in 1987, following a drop of one percentage point in 1986 and the average weight load factor increased accordingly, from 60 to 62 percent.

Table 10 provides a historical series of traffic statistics for the scheduled services of ICAO airlines over the past ten years.

Table 10
Scheduled Domestic and International World Air Traffic
1978 - 1987
Millions of..

	Passengers		Passenger-km		Freight Tonnes		Total Tonne-km	
Year		%chg		%chg		%chg		%chg
1978	679	11.2	936,000	14.4	10.6	5.7	113,540	13.0
1979	754	11.1	1,060,000	13.2	11.0	3.5	126,860	11.7
1980	748	-0.8	1,089,000	2.7	11.1	0.8	130,980	3.2
1981	752	0.5	1,119,000	2.7	10.9	-1.6	135,490	3.4
1982	766	1.8	1,142,000	2.1	11.6	6.0	138,460	2.2
1983	798	4.2	1,190,000	4.2	12.3	6.0	146,390	5.7
1984	847	6.2	1,277,000	7.4	13.4	9.1	159,090	8.7
1985	898	6.0	1,366,000	6.9	13.7	2.5	167,530	5.3
1986	956	6.5	1,451,000	6.2	14.7	7.0	178,640	6.6
1987	**1,037**	**8.5**	**1,591,000**	**9.7**	**15.8**	**7.8**	**196,640**	**10.1**

Source: ICAO Bulletin - July 1988

North Atlantic and World Traffic

Overall distribution of traffic among commodities, based on tonne-kilometres carried, has changed little over the past decade. In 1978, the ratio of passenger:freight:mail traffic was 74.3%:22.8%:2.9%; in 1987, these same ratios were 73%:24.6%:2.4%.

Table 11 - A

Total Scheduled Tonne-km Performed - Ranked by Country

Rank	Country	Millions of Tonne-kilometres (passengers, freight, mail)	
		1987 (est.)	1986
1	United States	73,340	66,072
2	U.S.S.R.	21,480	20,692
3	Japan	10,745	9,312
4	United Kingdom	10,210	8,836
5	France	7,440	6,696
6	Germany	6,451	5,526
7	**Canada**	**4,810**	**4,654**
8	Australia	4,340	3,861
9	Netherlands	3,909	3,416
10	Singapore	3,680	3,332
11	Brazil	3,060	3,074
12	Republic of Korea	2,975	2,691
13	Italy	2,650	2,395
14	Spain	2,445	2,332
15	India	2,195	1,931
16	Switzerland	2,133	1,987
17	China (excl. Taiwan)	2,005	1,505
18	Saudi Arabia	1,882	1,812
19	Scandinavia	1,870	1,818
20	Thailand	1,740	1,510
	Total for 157 ICAO Contracting States	196,640	178,637

Source: ICAO Bulletin - July 1988

North Atlantic and World Traffic

Rankings of the relative magnitude of scheduled air services, by country, are shown in terms of total tonne-km performed for the first 20 countries, in Tables 11-A and 11-B.

Table 11 - B

International Scheduled Tonne-km Performed - Ranked by Country

Rank	Country	Millions of Tonne-kilometres (passengers, freight, mail) 1987 (est.)	1986
1	United States	18,260	15,091
2	United Kingdom	9,880	8,531
3	Japan	7,420	6,318
4	Germany	6,158	5,258
5	France	5,998	5,469
6	Netherlands	3,905	3,412
7	Singapore	3,680	3,332
8	Australia	3,035	2,657
9	Republic of Korea	2,805	2,560
10	**Canada**	**2,575**	**2,440**
11	Italy	2,135	1,954
12	Switzerland	2,101	1,957
13	Spain	1,885	1,794
14	Thailand	1,662	1,451
15	U.S.S.R.	1,540	1,302
16	Brazil	1,400	1,379
17	India	1,342	1,160
18	Saudi Arabia	1,341	1,275
19	Israel	1,337	1,181
20	Scandinavia	1,305	1,289
	Total for all 157 ICAO Contracting States	101,560	89,627

Source: ICAO Bulletin - July 1988

North Atlantic and World Traffic

Over 43 percent of total passenger-kilometres performed involved international traffic. In terms of tonne-kilometres performed, over 75 percent of freight, and 41 percent of mail were carried on international services. With respect to traffic shares among indivdual countries, carriers of the United States and the U.S.S.R. continue to account for the lion's share -- approximately 48 percent -- of world traffic, due to their relative size, and hence the magnitude of their domestic air transport networks.

The world's regional distribution of scheduled traffic has experienced a gradual shift over the past decade. Despite widespread strong growth during these years, the international traffic shares of Asian and Pacific airlines have grown from 20.6 to 28.2 percent between 1978 and 1987, primarily at the expense of the North American and European airlines, whose combined share decreased from 62.9 to 57.2 percent during the same period.

The total number of international non-scheduled passenger-kilometres performed in 1987 increased by 17 percent, to over 157,200 million. The proportion of this traffic as a percentage of total world traffic also continues to climb steadily, in 1987 comprising almost 19 percent, an indication of the global changes taking place in the air transportation industry. During 1987, at least 16 new charter airlines were established within the European region.

Travel between the member countries of the European Civil Aviation Conference (ECAC) represents the world's largest international charter market, equivalent to volumes carried within this area via scheduled services. Preliminary statistics for 1987 indicate that the total number of international charter passengers handled by major European airports increased by approximately 15 percent. Charter travel by U.S. citizens declined in 1987, while the number of foreign visitors using charter flights rose by roughly 12 percent. Charter travel on routes to and from South America increased significantly -- 54 percent. A 5 percent decrease was noted in charter travel to/from the Caribbean and Central America, while charter travel on Asian and Pacific routes declined by 13 percent.

Preliminary estimates indicate that 1987 was another profitable year for the world's scheduled airlines, with an operating profit of approximately (US) $6.5 billion. This figure represents an increase of over 40 percent over the 1986 operating result of (US) $4.6 billion. Estimates of 1987 results for the world's non-scheduled carriers are not yet available due to insufficient data.

An increase in operating revenues of 16 percent, to an estimated (US) $144.5 billion, exceeded the 15 percent increase in operating expenses, estimated at (US) $138.0 billion. It is interesting to note that in 1987, the U.S. airlines (majors and nationals) accounted for roughly 38 percent of the total operating revenues.

Table 12 depicts the historical operating revenues, expenses and operating results between 1981 to 1987 for scheduled airlines of the ICAO Contracting States (excluding domestic operations in the U.S.S.R.). Operating results are also expressed as a percentage of operating revenues.

Table 12
Financial Results - ICAO Scheduled Airlines
(U.S.$000,000)

	Operating Revenues	Operating Expenses	Operating Result	
			Amount	% *of Operating Revenues*
1981	92,992	93,684	-692	*-0.7*
1982	93,240	93,400	-160	*-0.2*
1983	98,300	96,200	2,100	*2.1*
1984	105,400	100,300	5,100	*4.8*
1985	112,200	108,100	4,100	*3.7*
1986	124,600	120,000	4,600	*3.7*
1987	**144,500**	**138,000**	**6,500**	*4.5*

Source: ICAO Bulletin - July 1988

Although not yet available for 1987, a breakdown of operating revenues by source based on 1986 data, indicates that scheduled passenger operations accounted for 76 percent of the total. Scheduled cargo and mail operations accounted for 12 percent and 1 percent, respectively, while non-scheduled operations contributed another 3.6 percent.

Appendix A

Pertinent Items Relating to 1987 Traffic

1. Effective April 26, 1987, Canadian Airlines International Ltd. (C.A.I.L.), the company formed by Pacific Western Airlines' takeover of Canadian Pacific Air Lines, initiated a new schedule upon completing the amalgamation of the two carriers.

2. Effective August 1, 1987, Air Canada suspended service to Yarmouth, N.S.

3. Air Atlantic has been taking over routes from C.A.I.L. on a gradual basis beginning in February 1986.

4. On August 2, 1987, USAir commenced scheduled service between Ottawa and New York.

5. Effective September 6, 1987, Air Canada discontinued its direct service from Newark to Calgary.

6. On September 8, 1987, Northwest Airlines suspended service between Edmonton and Minneapolis, as well as direct service between Calgary and San Francisco.

7. Nationair launched a new scheduled service between Montreal and Brussels on May 2, 1987, offering three flights per week.

8. Effective January 1, 1987, Canadian Pacific Air Lines took over Nordair.

9. Presidential Airways Inc. discontinued its non-stop flights between Mirabel and Washington, D.C. on February 1, 1987.

10. Effective April 1, 1987, Delta Airlines took over Western Airlines.

11. Pilgrim Airlines suspended its service to Ottawa effective February 1, 1987 and discontinued service to Montreal on May 1, 1987. Pilgrim has now been integrated completely into the Business Express System.

12. Effective July 1, 1987, American Airlines took over AirCal.

13. TAP Air Portugal began serving Toronto on April 1, 1987.

14. On April 27, 1987, Air Canada began a new service between Toronto and Neweark.

15. Wardair suspended its scheduled service to San Juan, Puerto Rico from Toronto and Montreal at the end of April, 1987.

16. Air Canada suspended its weekly scheduled flights to Montego Bay, Nassau and Point à Pitre at the end of April, 1987.

17. On May 1, 1987, Aeromexico introduced new scheduled services from Cancun to Mirabel and Toronto.

18. Effective May 2, 1987, C.A.I.L. commenced a new service from Sao Paulo to Toronto, via Rio de Janeiro.

19. On June 5, 1987, United Airlines commenced a new service from San Francisco to Calgary.

20. Eastern Airlines discontinued its services to Ottawa on February 1, 1987.

21. On February 1, 1987, Continental Airlines began two new scheduled services, serving Washington - Montreal and Washinton - Ottawa.

22. Air Canada suspended its Halifax - Boston - New York scheduled service on February 1, 1987.

23. Air Canada operated scheduled services between Halifax and Bermuda from February 21 to April 25, 1987.

24. Sabena Begian World Airline introduced a new service from Brussels to Toronto on March 30, 1987.

25. As of the third quarter 1987, Austin Airways has been integrated into the Air Ontario system.

26. Air Transat entered the Canadian air charter market on October 19, 1987, and began flying out of Mirabel on November 14, 1987.

27. Quebecair did not operate any charters from July 10, 1987 to January 18, 1988 due to labour problems with ground workers and flights attendants.

28. CAAC, the Chinese national airline, commenced weekly services from Beijing and Shanghai to Vancouver International as of September 6, 1987.

29. Norcanair was completely integrated into Time Air by December 31, 1987.

30. Rotating strikes by Air Canada's ground workers began on November 26, 1987, and were settled on December 16, 1987.

Appendix B

Glossary of Terms

Air Passenger and Cargo Traffic

Arriving
The total passengers, mail and cargo arriving on an aircraft at an airport. It includes traffic remaining on board the aircraft (i.e. transiting traffic) as well as traffic deplaned (i.e. terminating plus connecting traffic).

Cargo (Revenue)
Refers to all air freight, air expreses and excess baggage for which any tariff is charged. Cargo does not include mail and stores, or passenger baggage for which no charge is made.

Charter
The transportation of passengers or goods, or both, by aircraft where a person other than the air carrier operating the aircraft, or its agent, contracts for a block of seats or a portion of cargo capacity for that person's own use or for resale in whole or in units to members of the public. This category is comprised predominantly of non-scheduled traffic. The statistics exclude operations with aircraft weighing less than 15,900 kg in the domestic and other international sectors, and 8,200 kg in the transborder sector.

Departing
The total passengers, mail and cargo departing on an aircraft from an airport. It includes traffic remaining on board the aircraft (i.e. transiting traffic) as well as traffic enplaned (i.e. orgininating plus connecting traffic).

Deplaned
The total passengers, mail and cargo off-loaded from an airplane at an airport. It therefore consists of connecting traffic (interline and intraline transfers) as well as that terminating at the airport. At airports where the flight number changes, all arriving traffic is reported as being deplaned, although this may not actually be the case.

Domestic
Refers to a flight from a Canadian point to another Canadian point.

Enplaned
The total passengers, mail and cargo put onto an aircraft at a particular airport. It therefore consists of connecting traffic (interline and transfers) as well as that originating at the airport. At airports where a flight number changes, all departing traffic is reported as being enplaned, although this may not actually be the case.

Freight (ICAO Definition)
All air freight including air express and diplomatic bags but no passenger baggage.

International
Refers to a flight to or from a non-Canadian airport. It is further sub-divided into ''transborder'' and ''other international''.

Mainline Unit Toll
Includes all scheduled services operated by Canadian Level I carriers (currently Air Canada, C.A.I.L., and Wardair). Also included are scheduled operations of foreign carriers to/from Canada, using aircraft with a gross take-off weight over 65,000 pounds (equivalent to an F-28 sircraft).

Other International
Refers to an international flight between Canada and an international point other than the United States (including Alaska and Hawaii).
NOTE: Prior to 1968, Hawaii was included in ''other international''.

Other Unit Toll
Includes all scheduled services operated by Canadian carriers other than Level I. Also included are scheduled operations of foreign carriers to/from Canada, using aircraft with a gross take-off weight of up to 65,000 pounds.

Revenue Passenger
Refers to passengers paying 25% or more of the normal applicable fare. (Airport Activity Survey)

Scheduled
Now referred to as mainline unit toll.

Transborder
Refers to an international flight between Canada and the United States (including Alaska and Hawaii).

Unit Toll
Refers to the public transportation of persons, mail and goods on a toll per unit basis, i.e. per passenger, per package or per pound of goods. This category is comprised predominantly of scheduled traffic.

Aircraft Movements

Air Carrier
All civil aviation activities which have been assigned an ICAO or Canadian domestic designator and operating a licenced air service with aircraft greater than 12,500 pounds gross take-off weight.

Aircraft Movement
An aircraft landing or take-off. Aircraft movements are classified either as ''itinerant'' or ''local''. Simulated approached (missed instrument or practice instrument approaches without landing) are included in local aircrtaft movements. Itinerant aircraft mvoements are reported on the basis of ''place arrived from'' or ''departed to''. Over-flights are not reflected in data published by Transport Canada on the aircraft movement survey.

Charter Service
Public transportation of passengers and goods at a toll per mile or per hour for the hire of all or part of the capacity of an aircraft.

Government Civil
Aircraft owned by federal, provincial and municipal bodies as well as foreign states, but excluding those owned by crown corporations, boards and commissions.

Government Military
Aircraft of any branch of the armed forces of any nation.

Itinerant Movements
Itinerant aircraft are considered as:
a) aircraft proceeding to or arriving from another location; or
b) aircraft that leave the circuit but will be returning to land.

Local Movements
Local aircraft are considered as aircraft which remain in the circuit.

Other Commercial
Flights performed by commercial aircraft operators not included in either Air Carrier - Unit Toll or Air Carrier - Charter. At airports with towers, it includes:
a) all unit toll and charter movements by non-designated air carriers;
b) charter movements by designated carriers of aircraft with a gross take-off weight of less than 12,500 pounds; and
c) non-transport movements by both designated and non-designated carriers.
At airports with towers, ''other commercial'' refers to all unit toll charter, and non-transport movements by non-designated air carriers.

Private Aircraft
Aircraft used solely for private purposes, not for hire and compensationwhich are classified as ''Private'' or ''Private Restricted'' in the Canadian Civil Aircraft Register or similar Registers of other countries. Owners include individuals, groups and business firms.

Simulated Approaches

Movements that are either missed instrument or practice instrument approaches without landing. (NOTE: Since May 1, 1972, simulated approaches have been grouped under ''local movements'' and no longer under ''type of operation''. Prior to June 1, 1971, simulated approaches were counted at source as only one movement. From June 1, 1971 to the present, simulated approaches have been counted as two movements.)

Appendix C

References

The data sources used to produce this report include:

(1) Air Transport Association of America

(2) Aviation Daily

(3) Aviation Statistics Centre, Statistics Canada

(4) Canadian Level I Carriers' Annual Reports

(5) International Air Transport Association (IATA)

(6) International Civil Aviation Organization (ICAO)

(7) Air, Statistics and Forecasts Branch, Economic Analysis Directorate, Policy and Coordination